

Rešenja zadatka sa trećeg kolokvijuma iz Operativnih sistema 2, januar 2023.

1. (10 poena)

```
void getRAID5Addr (long lBlock, long* diskNo, long* blockNo) {
    long b = lBlock + lBlock/DATA_BLOCKS;
    *diskNo = b%TOTAL_DISKS;
    *blockNo = b/TOTAL_DISKS;
}
```

2. (10 poena)

```
#!/bin/bash

if [ $# -lt 1 ]; then
    echo "Nedovoljan broj parametara"
fi

for i in /home/*; do
    file="$i/.bash_history"
    if [ -f $file ];then
        for j in $@;do
            if cat $file | grep ^$j && /dev/null; then
                echo $i | sed 's:/home/\.*)\):\1:'
            fi
        done
    fi
done | sort | uniq
```

3. (10 poena)

```
#define KEY 5555
#define MAX_ITER 10

struct msgbuf {
    long mtype;
    int value;
};

int main()
{
    int msg_box = msgget(KEY, IPC_CREAT | 0666);

    struct msgbuf message;

    if (fork() != 0) {
        for (int i = 0; i < MAX_ITER; i++) {
            message.mtype = 2;
            message.value = getX();
            msgsnd(msg_box, &message, sizeof(int), 0);
            msgrcv(msg_box, &message, sizeof(int), 1, 0);
            useY(message.value);
        }
        msgctl(msg_box, IPC_RMID, 0);
    } else {
        for (int i = 0; i < MAX_ITER; i++) {
            msgrcv(msg_box, &message, sizeof(int), 2, 0);
            message.mtype = 1;
            message.value = useXGetY(message.value);
        }
    }
}
```

```
        msgsnd(msg_box, &message, sizeof(int), 0);
    }
}
return 0;
}
```